## LISTING OF THE CLAIMS

Please amend the claims as follows:

Claims 1-23. (Canceled)

- 24. (Currently Amended) A method of introducing a nucleic acid encoding desired molecule into for stable and efficient transformation of cardiomyocytes which comprises: infusing a recombinant adeno-associated virus (AAV) vector into a coronary artery or a coronary sinus of an animal in an amount of about 1 x 10<sup>5</sup> to about 1 x 10<sup>9</sup> infectious units (IU) AAV per gram body weight and for a time sufficient to stably and efficiently transduce cardiomyocytes perfused through said artery or said sinus, wherein said AAV vector comprises at least one nucleic acid molecule operably linked to a control region, said
- 25. (Previously presented) The method of claim 24, wherein said AAV transduces at least about 10% of said cardiomyocytes.

nucleic acid molecule encoding said desired molecule an angiogenic protein.

- 26. (Previously presented) The method of claim 24, wherein said AAV transduces at least about 40% of said cardiomyocytes.
- 27. (Previously presented) The method of claim 24, wherein said AAV transduces at least about 50% of said cardiomyocytes.
- 28. (Previously presented) The method of claim 24, wherein said AAV is infused for at least about 2 minutes to about 30 minutes.
- 29. (Previously presented) The method of claim 24, wherein said AAV is infused for at least about 5 minutes to about 20 minutes.
- 30. (Previously presented) The method of claim 24, wherein said AAV is infused for about 15 minutes.
- 31. (Cancelled)
- 32. (Previously presented) The method of claim 24, wherein said amount of AAV is about 1 x  $10^6$  IU AAV per gram body weight to about 1 x  $10^8$  IU AAV per gram body weight.

- 33. (Previously presented) The method of claim 32, wherein said amount of AAV is about  $6 \times 10^7$  IU AAV per gram body weight.
- 34. (Cancelled)
- 35. (Previously presented) The method of claim 28, wherein about 1 x  $10^6$  IU AAV per gram body weight to about 1 x  $10^8$  IU AAV per gram body weight is infused.
- 36. (Previously presented) The method of claim 35, wherein about 6 x 10<sup>7</sup> IU AAV per gram body weight is infused.
- 37. (Previously presented) The method of any one of claims 28, 35, or 36, wherein said AAV is infused for about 5 to about 20 minutes.
- 38. (Previously presented) The method of claim 37, wherein said AAV is infused for about 15 minutes.
- 39. (Previously presented) The method of claim 24, wherein about 6 x 10<sup>7</sup> IU AAV per gram body weight is infused for about 15 minutes.
- 40. (Previously presented) The method of claim 24, wherein said coronary artery is infused ex vivo or in vivo.
- 41. (Cancelled
- 42. (Cancelled)
- 43. (Currently Amended) The method of claim 24, wherein said desired-molecule angiogenic protein is FGF-1, FGF-2, FGF-5, VEGF, or HIF-1.
- 44. (Cancelled)
- 45. (Previously presented) The method of claim 24, wherein said cardiomyocytes are in an individual having a vascular condition selected from the group consisting of restenosis, atherosclerosis, congestive heart failure, ischemic cardiomyopathy, malignant arrhythmia, myocardial infarction, congestive heart failure, and dilated and hypertrophic cardiomyopathy.
- 46. (Cancelled)
- 47. (Cancelled)